



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,881	09/06/2000	Shigeru Wakashiro	P19589	8885
7055	7590	08/25/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			KIBLER, VIRGINIA M	
			ART UNIT	PAPER NUMBER
			2623	10
DATE MAILED: 08/25/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/655,881

Applicant(s)

WAKASHIRO, SHIGERU

Examiner

Virginia M Kibler

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3 and 5 is/are rejected.
7) ☒ Claim(s) 2,4 and 6 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (6,437,823) in view of Nishimura et al. (5,631,697).

Regarding claims 1 and 3, Zhang discloses an image processing computer system and method (Figure 1) including identifying at least 4 feature points, thereby main and assistant reference point areas, to determine a 2-D position of each of the reference point areas of a target with respect to a 2-D picture coordinate system defined on the image (Col. 2, lines 20-42; Col. 8, lines 54-67, Col. 9, lines 1-24); a first calculator that calculates 3-D positions of the main reference point areas with respect to a 3-D camera coordinate system defined on a camera that photographs the picture (Col. 6, lines 17-67; Col. 9, lines 6-67, Col. 10, lines 1-44); a second calculator that calculates 2-D positions of the main reference point areas with respect to a 2-D image-plane coordinate system, defined on an image plane of the camera, based on the 3-D positions of the main reference point areas calculated by the first calculator (Col. 6, lines 17-67; Col. 9, lines 6-67, Col. 10, lines 1-44); and a third calculator that calculates camera parameters based on the 2-D positions of the main reference point areas with respect to the 2-D picture coordinate system and the 2-D positions of the main reference point areas with respect to

Art Unit: 2623

the 2-D image-plane coordinate system, the camera parameters including extrinsic camera parameters, thereby including a position and a direction of the camera when the picture is photographed (Col. 9, lines 6-25; Col. 10, lines 8-44; Col. 11, lines 14-31).

Zhang discloses identifying the feature points using conventional image processing techniques (Col. 2, lines 21-42; Col. 9, lines 6-8), but does not appear to expressly recognize a target-image extractor that extracts the image of the target from the picture, by detecting high luminance point areas, each corresponding to one of the main and assistant reference point areas of the target. However, Nishimura et al. ("Nishimura") discloses that it is known to provide a target-image extractor that extracts the image of the target from the picture by detecting a specified luminance (Col. 6, lines 14-44). Zhang and Nishimura are combinable because they are from similar problem solving area of feature identification. At the time of the invention, it would have been obvious to one of ordinary skill in the art to have modified the conventional image processing techniques to specify extracting a target-image by detecting high luminance point areas. The motivation for doing so would have been because it is a standard methodology routinely utilized in image analysis and performs the same function of extracting the feature points. Therefore, it would have been obvious to combine Zhang with Nishimura to obtain the invention as specified in claims 1 and 3.

Regarding claim 5, the arguments analogous to those presented above for claim 1 are applicable to claim 5. Note, Zhang clearly discloses a memory medium (Figure 1; Col. 4, lines 27-67, Col. 5, lines 1-47).

Art Unit: 2623

Allowable Subject Matter

3. Claims 2, 4, and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments, see pages 3-4, filed 6/8/04, with respect to the rejection of claims 1, 3, 5 under Kaneko have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Zhang in view of Nishimura.


Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia M Kibler whose telephone number is (703) 306-4072. The examiner can normally be reached on Mon-Thurs 8:00 - 5:30 and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Virginia Kibler can be reached on (703) 308-4072. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Virginia Kibler
08/20/04

MEHRDAD DASTOURI
PRIMARY EXAMINER

